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EDITORIAL

The Potential of Pluripotent Cells in Vitreoretinal Diseases1031

Richard F. Spaide

ORIGINAL ARTICLES

Autofluorescence of Choroidal Nevus in 64 Cases1035

The autofluorescence features of 64 consecutive patients with choroidal nevus revealed hypoautofluorescence (56%), isoautofluorescence (19%), and hyperautofluorescence (25%). Overlying retinal pigment epithelial hyperplasia, metaplasia, or atrophy showed dark hypoautofluorescence. Overlying drusen, subretinal fluid, and orange pigment showed increasingly bright hyperautofluorescence.

Carol L. Shields, Cesare Pirondini, Carlos Bianciotto, Miguel A. Materin, Sarah A. Harmon, Jerry A. Shields

Radial Optic Neurotomy for Central Retinal Vein Occlusion: Results of the Pan-American Collaborative Retina Study Group (PACORES)1044

Complications after radial optic neurotomy for central retinal vein occlusion (CRVO) are common. However, not all of them are directly related to the procedure. Surgery by itself does not seem to improve the natural history of CRVO and sometimes seems to be harmful.

J. Fernando Arevalo, Reinaldo A. Garcia, Lihteh Wu, Francisco J. Rodriguez, Jose Dalma-Weiszhausz, Hugo Quiroz-Mercado, Virgilio Morales-Canton, Jose A. Roca, Maria H. Berrocal, Federico Graue-Wiechers, Violeta Robledo

Long-Term Effect of Intravitreal Bevacizumab (Avastin) in Patients With Chronic Diffuse Diabetic Macular Edema1053

Even in cases of chronic diffuse ischemic diabetic macular edema, a long-term decrease of central retinal thickness can be observed following repeated intravitreal injections of bevacizumab. In these patients mean decrease in retinal thickness is aligned with a gain in mean visual acuity. Treatment with bevacizumab at an earlier stage of diabetic macular edema without ischemia may be associated with an even better functional outcome.

Daniel Kook, Atmin Wolf, Thomas Kreutzer, Aljoscha Neubauer, Rupert Strauss, Michael Ulbig, Anslem Kampik, Christos Haritoglou

Port Geometry and Its Influence on Vitrectomy1061

This report studies the affect of port geometry on specific surgical tasks. Optimal port geometries for vitreous and water removal were found. Modifying the port geometry of a vitreous cutter was also shown to affect its surgical interactions with tissue.

Charles DeBoer, Sophia Fang, Luiz H. Lima, Matt McCormick, Prashant Bhadri, Ralph Kerns, Mark Humayun

Primary 25-Gauge Sutureless Vitrectomy With Oblique Sclerotomies in Pseudophakic Retinal Detachment1068

In this study, 25-gauge sutureless vitrectomy was found to be effective and safe in the management of noncomplex pseudophakic rhegmatogenous retinal detachment with a single surgery success rate of 95% and final success rate of 100%. Postoperatively, visual acuity of 20/40 or better was achieved in 50% of eyes postoperatively.

Nur Acar, Ziya Kapran, Tugrul Altan, Yaprak Banu Unver, Serap Yurtsever, Yasar Kucuksumer

Primary 23-Gauge Transconjunctival Sutureless Vitrectomy for Rhegmatogenous Retinal Detachment1075

In a prospective consecutive case series, the results of 23-gauge transconjunctival sutureless vitrectomy compared favorably with conventional 20-gauge vitrectomy in treating rhegmatogenous retinal detachment in selected cases, with the potential benefit of reducing postoperative ocular irritation.

Chi-Wai Tsang, Benson Tze-On Cheung, Robert Fung Lam, Gary Ka-Yau Lee, Can Yin-Fun Yuen, Timothy Yuk-Yau Lai, Dennis Shun-Chiu Lam

The Safety of Intraocular Methotrexate in Silicone-Filled Eyes1082

Intravitreal methotrexate was used in silicone-filled eyes with advanced vitreoretinal pathologies. That acuity was preserved in 12 of 13 study eyes suggests that an aggregate intravitreal dose of up to 1,200 μ g methotrexate is safe in silicone-filled eyes.

Paul W. Hardwig, Jose S. Pulido, Sophie J. Bakri

Macular Hole Surgery With Air Tamponade and Optical Coherence Tomography-Based Duration of Face-Down Positioning1087

Air tamponade and face-down positioning for 1 to 3 days led to macular hole closure in 90.9% of cases. The duration of face-down positioning was based on postoperative optical coherence tomography imaging of the status of macular hole closure through the air tamponade using a special optical coherence tomography technique.

Claus Eckardt, Tillmann Eckert, Ute Eckardt, Ute Porkert, Caroline Gesser

Correlation Between Microaneurysms and Retinal Thickness in Diabetic Macular Edema1097

Retinal thickness analysis was used to test whether thicker areas of retina in diabetic retinopathy have more microaneurysms per unit area than do thinner areas. The finding that thicker areas did not have more microaneurysms may have implications on the pathogenesis of diabetic macular edema.

Norman P. Blair, Mahnaz Shahidi, Wico W. Lai, Ruth Zelkha

Retinopathy in Preeclampsia: Association With Birth Weight and Uric Acid Level1104

In a retrospective study of 40 patients with preeclampsia and 40 patients with pregnancy-induced hypertension, the association of retinopathy with various clinical and laboratory manifestations was evaluated. Retinopathy in preeclampsia was inversely related to fetal birth weight ($P = 0.044$) and positively related to serum uric acid level ($P = 0.022$). All other variables, including systolic and diastolic blood pressure, were insignificant.

Arvind Gupta, Subashini Kaliaperumal, Sajita Setia, Smitha T. Suchi, Vasudev Anand Rao

Macular Structure and Vision of Patients With Macular Heterotopia Secondary to Retinopathy of Prematurity1111

Patients with macular heterotopia secondary to retinopathy of prematurity have altered macular structure and reduced vision.

Grace P. Soong, Michael Shapiro, William Seiple, Janet P. Szlyk

Short-Term Efficacy and Safety of Intravitreal Ranibizumab for Myopic Choroidal Neovascularization1117

Ranibizumab seems to be promising for the treatment of choroidal neovascularization in highly myopic eyes, with or without previous photodynamic therapy. Short-term results show a significant improvement in visual acuity and a significant decrease in central macular thickness at 3 and 6 months with 1.9 and 2.5 injections, respectively.

Rufino M. Silva, José M. Ruiz-Moreno, João Nascimento, Ângela Carneiro, Paulo Rosa, Augusto Barbosa, Fausto Carvalheira, J. Rui Faria Abreu, José G. Cunha-Vaz

Lacquer Crack Formation and Choroidal Neovascularization in Pathologic Myopia1124

Indocyanine green angiography using Heidelberg Retina Angiograph 2 (Heidelberg, Germany) provides more detailed information on myopic choroidal neovascularization (mCNV) and lacquer cracks (LCs). LC formation is essential for classic mCNV to develop. Morphologic variations of LCs were not different clinically. Late-phase hyperfluorescence, probably due to the absence of pigment epithelium around the mCNV, may represent its activity.

Yasushi Ikuno, Kaori Sayanagi, Kaori Soga, Miki Sawa, Fumi Gomi, Motokazu Tsujikawa, Yasuo Tano

Combination Photodynamic Therapy and Intravitreal Ranibizumab in Neovascular AMD in a North Indian Population: A Pilot Study1132

Age-related macular degeneration (AMD) is the leading cause of severe visual loss in people older than 50 years of age. The Indian Aravind Comprehensive Eye Study determined an age-adjusted prevalence of AMD of 3.1%, which rapidly increased with age. Approximately 50% to 60% of patients with advanced AMD develop severe visual acuity loss within 5 years.

Atul Kumar, Kiran Gopalakrishnan, Subijoy Sinha

Vitreoretinal Complications of Osteodentokeratoprosthesis Surgery1138

Eyes receiving osteodentokeratoprosthesis (OOKP) are prone to vitreoretinal complications, with retinal detachment associated with a poor prognosis. Thicker OOKP laminae and lamina bulk screening will hopefully reduce the risk of endophthalmitis due to unexpected resorption.

Edward H. Hughes, Bataung Mokete, Gerard Ainsworth, Anthony G. Casswell, Michael B. Eckstein, Hadi J. Zambarakji, Zdenek Gregor, Paul H. Rosen, Jim Herold, Salim Oker, Christopher S. C. Liu

Risk Factors for Posterior Cystoid Retinal Degeneration in Central Serous Chorioretinopathy1146

The authors compared patients with long-lasting central serous chorioretinopathy with or without posterior cystoid retinal degeneration (PCRD) and found that development of PCRD is associated with subretinal fibrosis and symptoms persisting longer than 5 years.

Felice Cardillo Piccolino, Roberta Rigault de la Longrais, Marilisa Manea, Simonetta Cicinelli, Giambattista Ravera

Surveillance for Potential Adverse Events Associated With the Use of Intravitreal Bevacizumab for Retinal and Choroidal Vascular Disease1151

This study presents results of the largest American long-term single-center study of the adverse ocular and systemic events after intravitreal bevacizumab for ocular disease.

Lisa J. Wong, Rajen U. Desai, Atul Jain, David Feliciano, Darius M. Moshfeghi, Steven R. Sanislo, Mark S. Blumenkranz

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Submitted by Drs. Sang Beom Han, Jeong Hun Kim, Seong-Joon Kim, and Young Suk Yu; Commented by Dr. Emmett T. Cunningham, Jr.; Edited by H. Richard McDonald

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